PRECISE GRAIN LOADING FROM THE CAB

New innovative system for easier grain loading hits the market.

by Kathy Huting

THE TAKEAWAY

- The Load Judge is a new technology on the market for precise grain loading.
- The system uses sensors in a grain trailer and an app to monitor loading from the cab.
- The Load Judge makes grain loading safer and more efficient. and can be installed easily.

A new technology is hitting the market this month that will allow for precise grain loading that can be monitored from the comfort of a semi cab. The system is called Load Judge, and it was developed by Shawn Gengerke, an entrepreneurial fourth-generation corn and soybean farmer from northeast South Dakota. Gengerke is CEO of Leading Edge Industries, the company that makes the Load Judge system.

"Imagine you're loading a truck and the whole driver's side trailer sidewall would be a transparent wall, and you can see through it," Gengerke says. "That's exactly how it would appear on your iPhone or your iPad, or whatever device you have."

Six proximity sensors placed inside a trailer are able to detect grain as it flows in, and they send fresh data once every second to an app on the user's smartphone or tablet (it works on Apple or Android systems). The app builds real-time imagery of the grain's height in each hopper, so the driver in the cab knows when to move forward. It also tells the operator how many



The operator can see the flow and curvature of the grain as it loads in real time on the Load Judge app.

bushels have been loaded and the estimated weight.

The Load Judge helps operators avoid loading axles beyond weight ratings, which can cause lost time in making adjustments to a load — or even a traffic ticket. Convenience and comfort are two additional advantages, as operators can load grain easily in dusty, windy, cold or hot conditions, and even at night. And the system only requires one operator.

"In order to load accurately and consistently, you needed an extra guy to climb up and down to guide you to know when you needed to move the truck," Gengerke says. "A lot of times it's either cold or hot, but the biggest thing is the dust. The problem was that on the market, there was no technology that could defeat the dust and the filthy conditions."

filthy conditions." Gengerke set out to develop a solu-tion. After a lot of research and build-ing and testing multiple technologies, he and his team perfected the Load Judge product and are using it in their semi on their farm now.

Once the Load Judge app has been downloaded continued on page 42

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Neil Hoff CHS Product Marketing Manager

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continued from page 40



The sensors have LED lights that flash once every second, and the data on the grain that's being loaded is transferred wirelessly to the app.

and the hardware is installed, the user selects the trailer type and brand in the app. Then he or she is ready for the first load, and the app saves the information for future loads. A load line is established from that first load, so the user can come back and load the grain exactly the same as before. And during loading, the app estimates the number of bushels, the weight and the grain's moisture levels.

The Load Judge kit includes a Wi-Fi box with custommade hardware mounted on the trailer. A moisture sensor monitors the moisture of the grain during loading, and a quick-attach plug connects the sensors to the trailer's clearance lighting system.

Also included are all the materials needed to mount the system onto a trailer. Gengerke says the system is easy to install, and no holes need to be drilled.

The app will be free to download from iTunes or Google Play, and the hardware kits will range from \$6,000 to \$6,500. The first kits on the market will be for 72- to 78-in. sidewall trailers. The full system will be available in December.

Visit leadingedgeind.com for more information and to watch the Load Judge in action, or circle 121.

And stay tuned for more news from Leading Edge. Gengerke hints that he and his crew are working on more innovative technologies that don't yet exist on the marketplace.

"We have other products coming down the pipeline on the ag innovation side of things," Gengerke says. "It's kind of like the Load Judge; they're all products that don't exist yet. me otohd to fix problems that haven't been fixed yet, so there's some pretty exciting things that are coming in the future."